

Abstract

A filter such as an air having a reagent which chemically reacts with and removes a gaseous component of an air stream. The reagent contains functional groups covalently bonded to a non-volatile inorganic substrate which is

5 incorporated in the filter. The filter can remove gaseous components such as aldehydes. Preferred functional groups are 3-aminopropylsilyl groups covalently bonded to silica gel (APS silica gel). The reagent can be contained in a space in the filter or incorporated in one or more filter elements. The reagent can be part

10 of or coated on paper such as filter paper or incorporated in non-paper filter elements formed from fibrous materials such as cellulose acetate or polypropylene fibers. Other preferred reagents include aminoethylaminopropylsilyl silica gel (AEAPS) and aminoethylaminoethylaminopropylsilyl silica gel (AEAEAPS).

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